

Amendments to the Specification:

Please replace paragraph [0063] with the following amended paragraph:

[0063] In some embodiments, the representative data is used directly for the control of the remaining portion of the block. In other embodiments, interpolation and/or extrapolation methods are used for suitable system parameters, such as linear motor phase. That is, representative data obtained for the representative areas may be used to interpolate data between the representative areas and extrapolate data beyond the representative areas. As a result, more continuous and suitable correction for the control of the entire operating range may be created from the representative data sets. Fig. 7 shows an example of an interpolation/extrapolation curve 700 for the learning data or feedforward output (u_{output}) generated by the position compensation module 515 as a function of stage velocity using three representative data points 704, 706, 708. Fig. 7 shows a linear function. To move the stage with a certain stage velocity, the feedforward controller may use this interpolated data, instead of the original learning data.